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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,865	07/25/2001	Georges Marcel Victor Thielen	DN2000147	6253

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The Goodyear Tire & Rubber Company
Patent & Trademark Department - D/823
1144 East Market Street
Akron, OH 44316-0001

EXAMINER

FISCHER, JUSTIN R

ART UNIT	PAPER NUMBER
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1733

3

DATE MAILED: 02/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/912,865

Applicant(s)

VICTOR THIELEN, GEORGES
MARCEL

Examiner

Justin R Fischer

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2, 3, 6, 7, 9, 10, and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 2, 3, 6, 7, 9, and 10, the language "the insert" appears in line 1 of claims 2 and 3. It is suggested that applicant amend the claim to read - -said at least one insert - -.

Regarding claim 12, the language "said insert" appears in line 1. It is suggested that applicant amend the claim to read - -said at least one insert - -.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oare (US 5,871,600) in view of Wolpers (US 5,342,900) and optionally in view of Horpel (EP 385703). As best depicted in Figure 2A, Oare is directed to a runflat tire having at least one sidewall insert radially inward of a carcass ply, wherein said sidewall insert is

Art Unit: 1733

formed of a diene-based rubber composition. In describing the conventional additives of said sidewall insert composition, Oare describes the preferred use of (a) a sulfenamide as a primary accelerator and (b) either a guanidine, dithiocarbamate, or thorium compound as a secondary accelerator (Column 18, Lines 35-45). While Oare fails to expressly suggest the use of a specific dithiocarbamate compound (claimed as being 1,6-bis(N,N'-dibenzylthiocarbamoyldithio)-hexane or BDBzTH), one of ordinary skill in the art at the time of the invention would have found it obvious to include BDBzTH in the sidewall insert composition of Oare since it represents a well known compound that provides improved ageing stability and reversion stability in similar diene-based rubber compounds, as evidenced by Wolpers. In this instance, Wolpers specifically suggests the use of BDBzTH with either sulfenamide or mercapto accelerators for the general manufacture of tire rubber components (Column 4, Lines 4-21 and Column 5, Lines 16-29). Horpel is optionally applied to evidence the recognized use of similar dithiocarbamate compounds in tire sidewall compositions for similar benefits as compared to Wolpers, such as ageing resistance, high flexibility, and high resistance to cracking (Abstract).

Although Wolpers fails to specifically describe the use of BDBzTH in a sidewall insert, the reference more broadly teaches the general use of BDBzTH in diene-based rubber compositions for improved ageing stability and reversion stability. In particular, Wolpers suggests that such a compound can be of great importance for a variety of industries, including vehicle tires (Column 5, Lines 20-29). Thus, since it is well recognized in the tire industry that ageing stability and reversion stability are desired

Art Unit: 1733

characteristics of sidewall inserts, one of ordinary skill in the art at the time of the invention would have found it obvious to include BDBzTH in the sidewall insert composition of Oare, it being noted that Oare describes a preferred embodiment in which a dithiocarbamate compound is included in the vulcanization system.

Furthermore, Horpel evidences the well-known use of similar dithiocarbamate compounds in tire sidewalls for the benefits of ageing resistance, high flexibility, and high resistance to cracking.

Regarding claims 2 and 7, Wolpers suggests the use of BDBzTH in an amount between 1.0 and 4.5 phr (Column 4, Lines 25-30).

With respect to claims 3, 9, and 10, Oare describes the use of carbon black in an amount between 30 and 100 phr (Column 17, Lines 37-40).

Regarding claims 4, 8, and 11, Oare describes the preferred use of natural cis 1,4 polyisoprene rubber, isoprene/butadiene rubber, and cis 1,4 polybutadiene rubber (Column 16, Lines 35-40). With specific respect to claim 8, this limitation is only required when a rubber coupled with a group IVa metal is selected (claim 4 does not require the use of a rubber coupled with a group IVa metal). It is noted, though, that such a rubber (coupled with metal) is extensively used in the manufacture of sidewall components and one of ordinary skill in the art at the time of the invention would have found it obvious to form the sidewall insert of Oare from a metal-coupled rubber.

Regarding claim 5, Oare suggests the use of several bifunctional sulfur containing organo silane coupling agents in accordance to the limitations of the claimed invention (Column 17, Lines 55-61).

With respect to claim 6, Oare further suggests the filler component contain silica in addition to carbon black, as is well known in the tire industry (Column 17, Lines 51-55).

Regarding claim 12, Figure 2A of Oare depicts a first crescent-shaped, sidewall insert 42 that is disposed axially inward of a carcass ply 38 and a carcass ply 40.

With respect to claim 13, Oare is directed to the use of different cords in the inner and outer carcass plies, wherein a specific embodiment is described in which the inner carcass is formed of high modulus, steel cords and the outer carcass is formed of lower modulus organic fiber cords (Column 3, Lines 5-15).

Conclusion


5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Jeske (EP 1000968) is directed to a rubber composition having BDBzTH in combination with a sulfenamide and a guanidine compound. In this instance, Jeske suggests a preferred use of such a rubber composition in tire treads in order to obtain improved abrasion resistance.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R Fischer** whose telephone number is **(703) 605-4397**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on (703) 308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Art Unit: 1733

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Justin Fischer

February 11, 2003



Michael W. Ball
Supervisory Patent Examiner
Technology Center 1700